



USING A GAMING TOOL TO HELP REDUCE CYBER BULLYING AND ONLINE HARASSMENT

Final year project

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1.1 Introduction

The rise of social media platforms has led to an increase in online harassment and cyberbullying, posing threats to individual well-being and societal harmony. This project aims to develop a gamification concept to educate users about online harassment and empower them with strategies to mitigate it. The tool will use websites, gamify concepts and the help of a cyber security specialist to create an engaging learning experience. By incorporating behavioral psychology and user-centered design principles, this project aims to create safer, more inclusive online environments. According to a survey conducted in 2013, Campbell et al., the perception of no repercussions and a decrease in social and contextual cues are the main causes of cyberbullying. The online environment lacks a number of key factors that a conventional bully may have used to halt or avoid their acts in the first place, such as empathy for the victim's distress or fear of negative social reactions from peers and authority figures.

1.2 Background.

Bullying is a type of hostile activity in which an individual deliberately causes pain or injury to another person on a regular basis. Bullying can occur through words, gestures, or more covert acts. The deliberate and persistent use of technology to harass, harm, disgrace, degrade, or threaten someone else is known as cyberbullying. Cyberbullying is the term for bullying that occurs on digital platforms such as tablets, laptops, and smartphones. Cyberbullying can happen via text messages and applications, as well as online in forums, social media, and video games where users can watch, interact with, and share material. Sending, publishing, or disseminating derogatory, harmful, false, or cruel content about another person is considered cyberbullying. It may involve disclosing sensitive or personal information about another individual, which could be embarrassing or degrading. Certain instances of cyberbullying transcend into illegality. Any form of bullying can negatively affect the victim's well-being, both at the time the bullying occurs and in the future. Psychological research suggests being victimized by a cyberbully increases stress and may result in anxiety and depression symptoms. Some studies find anxiety and depression increase the likelihood adolescents will become victims to cyberbullying.

Cyberbullying can also cause educational harm, affecting a student's attendance or academic performance, especially when bullying occurs both online and in school or when a student has to face their online bully in the classroom. Kids and teens may rely on negative coping mechanisms, such as substance use, to deal with the stress of cyberbullying. In extreme cases, kids and teens may struggle with self-harm or suicidal ideation.

Students who engage in cyberbullying have higher rates of stress, depression, and anxiety than students who do not. According to Ybarra and Mitchell (2004), among those who cyberbullied, 39%

dropped out of school, 37% displayed delinquent behaviour, 32% regularly used drugs, and 16% had severe depression.

Support groups, hotlines, and internet forums are only a few of the resources covered in the text for victims of cyberbullying. Aspects like accessibility and lack of anonymity that may be drawbacks of conventional support systems are also covered. Using gaming platforms as a focal point, the essay also explores the advantages of gamified intervention. In order to mitigate cyberbullying, the project intends to design a prototype gaming tool and assess its efficacy.

1.3 Research problem statement.

This research aims to create a comprehensive gaming tool with cutting-edge features and mechanisms designed to mitigate and combat instances of cyberbullying, thereby fostering a safer and more inclusive gaming environment for users. The research addresses the prevalence of cyberbullying in online gaming communities.

1.4 Research questions

- a. What are the most typical types and symptoms of cyberbullying that are seen in online gaming groups, and how common is it?
- b. Which solutions or techniques are currently in use to address cyberbullying in gaming contexts, and what are the benefits and drawbacks of each?
- c. What particular functions and features can be added to a gaming application to quickly and accurately identify and stop instances of cyberbullying?
- d. How do consumers feel about the usability, efficacy, and general user experience of the suggested gaming tool?
- e. What potential privacy and ethical issues could arise from using a gaming tool to stop cyberbullying, and how can these issues be successfully resolved?
- f. During a certain time frame, how much of an effect does the gaming tool's launch have on the frequency and seriousness of cyberbullying occurrences inside gaming communities?
- g. Regarding game platforms, genres, and player demographics, how does the tool's usefulness change?
- h. How can the gaming community and players themselves promote the gaming tool's widespread adoption and engagement?
- i. When it comes to cyberbullying, how does the application of the gaming tool affect players' views and actions both inside and outside of the gaming world.

1.5 .RESEARCH AIM AND OBJECTIVES

Aim

The goal is to create and assess a gaming tool that will help online gaming communities fight cyberbullying and create a more inclusive and safe gaming environment.

b. Objectives

1. Conduct a comprehensive literature review on cyberbullying in online gaming contexts, examine its prevalence and methods, and develop a gaming tool to detect, prevent, and reduce cyberbullying in real-time using advanced features.
2. The study explores the privacy and ethical implications of gaming technology, its impact on cyberbullying, its efficacy based on genre, user demographics, and platform, and strategies to encourage widespread gaming usage.
3. The study explores the impact of gaming tools on players' attitudes and behaviors towards cyberbullying, with implications for gaming technology, social psychology, and cyberbullying prevention.

1.6. Limitations/ scope of study

1. This study's results may not apply to all gaming settings or online gaming communities, and technical restrictions like device specifications and network latency may impact gaming success.
2. Ethical considerations and time constraints may impact the study's results and the gaming tool's size, despite user privacy and consent considerations.
3. The project's scope and implementation may be limited by financial, technology, and human resource constraints, while external factors like gaming trends and technology advancements may impact its applicability.

1.7. RESEARCH METHODOLOGY

1. Literature Review: To find gaps and practical solutions, review the body of research on gaming interventions and cyberbullying.
2. Work with game creators to develop a gaming solution that addresses cyberbullying by utilising strategies backed by research.
3. To guarantee authenticity and representation, it is important to seek out volunteers from a variety of backgrounds
4. Implementing the intervention: Give participants access to the gaming tool for a certain amount of time while keeping an eye on their participation and any technical difficulties.

5.Data collection: To evaluate the tool's effectiveness, collect quantitative data via questionnaires administered before and after the intervention and qualitative data through interviews.

6.Data analysis: Examine gathered information to gauge shifts in attitudes and actions related to cyberbullying.

7. Conclusion: Provide a summary of the research and discuss the implications for using gaming technologies to stop cyberbullying.

1.8 Organisation of the thesis

This project aims to explore the use of gaming technology as an intervention to combat cyberbullying, particularly among adolescents. The project will design and develop a gaming tool incorporating evidence-based strategies to reduce cyberbullying behaviors and promote empathy. Participants will be recruited from diverse demographic backgrounds, and data will be collected through surveys and focus group discussions. The findings will contribute to the growing body of research on gaming technology's potential to address cyberbullying and inform future interventions promoting positive online interactions and a safer digital environment.

Chapter 2 :Literature review

Gamification tools like "ReThink" and "STOPit" use interactive elements to educate users about identifying, preventing, and responding to cyberbullying. These tools increase engagement and information retention, but may lead to superficial engagement and resource-intensive development.

Advantage and disadvantage of using a gamification too to reduce cyber bullying.

Gamification tools can enhance learning and awareness about cyberbullying by incorporating game-like elements like points, levels, and rewards. This leads to increased participation and better retention of information. However, there is a risk of superficial engagement, where users focus on earning rewards rather than understanding the content. Additionally, gamification can be resource-intensive, making it difficult for small organizations or schools to implement and sustain such programs. Balancing these advantages and disadvantages is crucial for creating effective programs that educate and empower users to combat cyberbullying effectively. Therefore, it is essential to balance these advantages and disadvantages when developing effective programs.

Traditional methods of managing cyberbullying, such as education, direct intervention, and policy enforcement, were the primary methods before the advent of gamification tools.

1. Talks: Academicians and professionals will present lectures on the effects of cyberbullying, highlighting the significance of acting with courtesy on the internet. Printed Documents: An informational packet with materials on how to identify and handle cyberbullying was delivered, along with brochures, posters, and handouts. Activities Based on Role-Playing: Students engaged in role-playing to develop empathy and understanding by learning about the viewpoints of bullies and victims. First-hand Assistance Schools and organisations responded directly to incidences of cyberbullying by taking the following actions.

2.Counselling: To address the psychological effects and underlying issues causing cyberbullying, counselling services were made available to both victims and offenders. Mediation: In order to settle disputes and advance understanding, trained mediators facilitated conversations between the bully and the victim. Disciplinary Actions: If a student is determined to have engaged in cyberbullying, the school may impose disciplinary actions, such as suspension or expulsion.

3. Enforcement of Policy: To give a framework for stopping and dealing with cyberbullying, policies and guidelines were created.

4.Reporting Systems: To allow victims and onlookers to safely report occurrences without fear of reprisal, systems were put in place to facilitate anonymous reporting of cyberbullying.

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Chapter 3: SYSTEM ANALYSIS AND DESIGN

Platform Name: CyberGuardians

Key Features

User Profiles and Avatars: Allow users to create profiles with customizable avatars to promote individuality and engagement.

Educational Modules: Interactive lessons on what cyberbullying is, its effects, and how to handle it.

Quizzes and games to reinforce learning.

Reporting System: Easy-to-use reporting tools for users to report bullying anonymously.

Immediate feedback and support resources provided upon reporting.

Reward System: Points and badges for completing educational modules, reporting bullying, and engaging in positive behavior.

Leaderboards to encourage friendly competition in promoting positive behavior.

Support Resources: Access to professional advice, hotlines, and counseling services.

Forums and chat rooms moderated by professionals where users can share experiences and support each other.

Challenges and Missions: Weekly missions to promote positive behavior, such as complimenting others, standing up to bullying, or helping a friend. Challenges to spread awareness about cyberbullying.

Role-Playing Scenarios: Interactive scenarios where users can practice responding to cyberbullying in a safe environment.

Feedback and tips provided based on user choices.

Parent and Educator Portals: Resources and tips for parents and educators on how to talk about and handle cyberbullying.

Tools to monitor and support children's activities on the platform.

Game Mechanics: Levels and Progression:

Users start at a basic level and progress by completing modules, missions, and positive interactions.

Unlock new features, customization options, and higher status as they progress.

In-Game Currency: Earned through positive actions and module completions.

Used to purchase avatar upgrades, special features, or donate to causes against bullying.

Achievements and Badges: Reward users for milestones such as reporting a bully, helping a peer, or completing a certain number of educational modules.

Visible on profiles to encourage positive behavior.

Mini-Games and Activities: Engaging games that reinforce the lessons learned in educational modules.

Include puzzles, role-playing games, and trivia.

Implementation Steps:

Research and Development: Collaborate with psychologists, educators, and cyberbullying experts to create content.

Develop a detailed plan for game mechanics, user interface, and content delivery.

Design and Prototyping: Create wireframes and prototypes of the platform.

Test with a small group of users for feedback and improvement.

Development: Use agile methodologies to develop the platform in stages.

Ensure robust data protection and privacy measures are in place.

Testing and Launch:

Conduct thorough testing, including usability, security, and stress testing.

Launch the platform with marketing campaigns targeting schools, parents, and youth organizations.

Maintenance and Updates: Regularly update the platform with new content, features, and improvements based on user feedback.

Continuously monitor and improve security measures.

Success Metrics:

User Engagement:

Track the number of active users, completed modules, and reported incidents.

Behavioral Impact: Measure changes in user behavior and attitudes towards cyberbullying.

Feedback and Improvement: Collect user feedback and continuously improve the platform.

Conclusion: CyberGuardians aims to create a safe, educational, and engaging environment where users can learn about cyberbullying, practice positive behavior, and support each other. By leveraging gamification, the platform encourages sustained engagement and promotes a positive online community.